DOCUMENT RESUME

ED 229 792 CS 207 537

AUTHOR Wresch, William
TITLE Essay Writer: A Program to Help Students through the Writing Process.
PUB DATE Mar 83
NOTE 11p.; Paper presented at the Annual Meeting of the Conference on College Composition and Communication (34th, Detroit, MI, March 17-19, 1983). Document may not reproduce well due to broken print.
PUB TYPE Speeches/Conference Papers (150) -- Guides - Classroom Use - Guides (For Teachers) (052)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Computer Assisted Instruction; *Computer Programs; *Essays; Higher Education; Teacher Role; *Writing Exercises; *Writing Instruction; *Writing Processes

ABSTRACT

A five-part computer program helps college students generate essays. Its first part, a list generator, forces students to consider a number of subjects and to select one that is reasonably defined. The second part of the program asks a series of questions to elicit information about the chosen topic and to shape the information into appropriate paragraph form and essay type (argumentative or descriptive). The third part of the program orders all the data and combines them, with some transitions, to create a complete essay, while the fourth section transmits the essay to a screen, printer, or floppy disk. In its last section, the program explains how and why it did what it did in order to help the student understand and apply the approach without the computer. (An example of a student essay written on the computer is included.) (JL)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED229792

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
This document has been reproduced as received from the person or organization originating it.
X Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

ESSAY WRITER : A Program to help students through the writing process

William Wresch, Ph.D.
UWC-Marinette County
Bayshore
Marinette, WI 54143

I have been saying publicly for the past two or three years that if the computer is ever going to be a serious part of the English curriculum it has to do more than drill students in verb forms and spelling rules. I have said we need programs that help with the writing process. Some such programs already exist, such as Hugh Burns' pre-writing program at the Air Force Academy, Richard Lanham's editor at UCLA, and others I summarized in a recent article in College English.

Sooner or later I knew I was going to have to dive in and try to write such a program myself, which of course is much less fun than critiquing other people's programs, but it couldn't be put off forever. What I would like to describe briefly is my attempt at creating a writing program, my beginnings, my orientation, my progress, and, where candor can't be avoided, my problems with the program.

My writing program actually began in the fall of 1980. I had taken a year's leave of absence to study computer programming at UW-Madison, and tried to put something together as a project in one of my graduate courses. I picked a language (SNOBOL) which handled words ("strings" in computerese) well and tried to write a program which would ask a person questions, retain the answers, and reassemble answers in the form of various essays on command.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
William Wresch
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

CS 207 537

For example, the program asked the user to pick a subject, compare it to another subject, state what caused it to be the way it was, how it had changed over time, etc., and then used transitions and a simple template to create either a compare/contrast, cause/effect, or one of several other type essays.

The program worked, but the essays were stilted and pretty undeveloped. Clearly I didn't have a way yet to automatically write four or five New Yorker articles a minute.

When I got back from my leave I left behind large computers and SNOBOL and decided to keep working using BASIC and an Apple II micro. I also decided what I didn't want was a "magic box" that wrote essays for students, but a program that led them through a writing exercise, gave them some sample output, and explained fully how the program had done what it had done.

The result is a program in five parts.

The first part is a list generator. I don't know about you, but my freshman writers tend to make two writing errors right off the top. First they write about the first subject that comes to mind, even when just a few minutes thought would have brought them a better subject. Secondly they rarely narrow a subject down to a point where it can be adequately dealt with in under 5 million words. If I had a dime for every student who decided to pick such subjects as "college," "writer," and "part-time jobs," I would never have to fly tourist again.

As a result I made sure the program started by doing what all of us do in our classes - get students to consider a number of subjects, and select one that is reasonably defined. The method the program uses is to have students list ten possible subjects, select one, list ten related subjects, select one, and then select a single approach to that subject. This doesn't insure a suitable subject but it at least gives students one procedure for finding a suitable subject.

The second part of the program asks for information about the chosen subject. Below is an example of how that questioning proceeds:

GOOD. HOW LET'S TAKE A CLOSER LOOK AT COLLEGE ENGLISH TEACHERS. TO BEGIN WITH, WHICH OF THE FOLLOWING AREAS WOULD TELL ME THE MOST ABOUT COLLEGE ENGLISH TEACHERS

1 ... HISTORY

2 ... APPEARANCE

3 .... CAUSES

4 ... JOB OR FUNCTION

TYPE IN THE NUMBER OF THE APPROACH THAT WOULD TELL ME THE MOST ABOUT YOUR SUBJECT, AND THEN HIT RETURN

? 4

SO THE JOB OR FUNCTION OF COLLEGE ENGLISH TEACHERS IS THE MOST IMPORTANT PART OF COLLEGE ENGLISH TEACHERS?

THAT'S PROBABLY TRUE, BUT CAN YOU PROVE IT TO ME? WHY NOT TRY. I'M INTERESTED, AND BESIDES, IT WILL GIVE YOU A CHANCE TO THINK THROUGH YOUR OPINIONS. I'M GOING TO PUT THREE NUMBERS ON THE SCREEN. AFTER EACH ONE TYPE IN A COMPLETE SENTENCE THAT PROVES THAT THE JOB OR FUNCTION IS THE MOST IMPORTANT PART OF COLLEGE ENGLISH TEACHERS

1...? THEY PLAY A CRUCIAL ROLE IN MODERN SOCIETY.

2...? THEIR JOB IS CURRENTLY CHANGING.

3...? NO ONE CARES MUCH WHAT THEY DO AWAY FROM THE JOB.

As you can see, the subject chosen was college English teachers. The author (you can guess who that was) chose job or function as the best approach to the subject. The next little routine both queried the author and gathered enough data to supply an introductory paragraph later.

Now the job or function of the program was to create a list of jobs. I chose to go for six here, but any number would work. My students, however, generally run out of steam after three or four. In any case once we have a list of these jobs we can use the most important as topic sentences in the final essay.

Here are the responses from this author:

IF I GAVE YOU 6 NUMBERS ON THE SCREEN, COULD YOU WRITE
A COMPLETE SENTENCE AFTER EACH ONE DESCRIBING A JOB OR
FUNCTION OF COLLEGE ENGLISH TEACHERS?

PLEASE TRY. REMEMBER TO PRESS RETURN AFTER EACH SENTENCE.

1...? THEY GRADE MOUNTAINS OF PAPERS.

2...? THEY TRY TO GET STUDENTS TO APPRECIATE WHAT WRITING
REALLY IS.

3...? THEY HAVE ONE SEMESTER TO PREPARE STUDENTS FOR ALL THE
TYPES OF WRITING THEY WILL DO IN FOUR YEARS OF COLLEGE.

4...? THEY GO TO REALLY DULL DEPARTMENT MEETINGS.

5...? THEY READ PROFESSIONAL JOURNALS.

6...? IN ODD MOMENTS THEY MAY ACTUALLY GET TO DO SOME WRITING
THEMSELVES.

Now the author has another choice. Is this to be a descriptive or argumentative essay (the only two possibilities programmed so far). The choice will determine the next set of questions.

NOW LET ME GIVE YOU ANOTHER CHOICE. DO YOU JUST WANT TO DESCRIBE THIS A JOB OR FUNCTION OF COLLEGE ENGLISH TEACHERS? OR DO YOU WANT TO PROVE HOW IMPORTANT IT IS? TYPE IN EITHER 'ARGUE' OR 'DESCRIBE' AND HIT RETURN.

?DESCRIBE

GOOD. LET'S TRY A DESCRIPTIVE ESSAY. TO BEGIN WITH INPUT THE NUMBER OF THE THREE MOST IMPORTANT STATEMENTS BELOW. (REMEMBER TO HIT RETURN AFTER EACH NUMBER.)

1...THEY GRADE MOUNTAINS OF PAPERS.

2...THEY TRY TO GET STUDENTS TO APPRECIATE WHAT WRITING REALLY IS.

3...THEY HAVE ONE SEMESTER TO PREPARE STUDENTS FOR ALL THE TYPES OF WRITING THEY WILL DO IN FOUR YEARS OF COLLEGE.

4...THEY GO TO REALLY DULL DEPARTMENT MEETINGS.

5...THEY READ PROFESSIONAL JOURNALS.

6...IN ODD MOMENTS THEY MAY ACTUALLY GET TO DO SOME WRITING THEMSELVES.

Having determined that this will be a descriptive essay the program tries to find the three most important jobs because these will be the ones fully developed into paragraphs. Three was my choice to mirror the standard five paragraph essay. Two or Twelve could probably be justified just as easily.

Having selected the three, the next job of the program is to elicit information about each job. This information will become

the body of the paragraph.

Here is the questioning for the first paragraph.

LET'S START WITH THE FIRST MAJOR A JOB OR FUNCTION OF COLLEGE ENGLISH TEACHERS. YOU SAID IT WAS THEY GRADE MOUNTAINS OF PAPERS.

I'M GOING TO GIVE YOU SPACE FOR SIX DESCRIPTIVE SENTENCES. I'D LIKE YOU TO TYPE IN AS MANY SENTENCES AS YOU CAN, DESCRIBING THIS A JOB OR FUNCTION OF COLLEGE ENGLISH TEACHERS.

BE SURE TO HIT RETURN AT THE END OF EACH SENTENCE. IF YOU CAN'T THINK OF SIX SENTENCES JUST HIT RETURN EACH TIME I PRINT OUT A NUMBER.

1...? IN A SINGLE SEMESTER THEY MAY HAVE TO GRADE SIX TO TEN SETS OF ESSAYS FOR EACH CLASS.

2...? THEY MAY ALSO HAVE TO LOOK THROUGH SEVERAL REVISIONS FOR EACH ESSAY.

3...? THEY HAVE TO READ THE ESSAY FOR LOGIC, CONTENT, GRAMMAR AND SPELLING, AND RHETORICAL EFFECT.

4...? THEIR RESPONSES TO STUDENTS HAVE TO BE CLEAR AND ENCOURAGING YET NOT OVERLY ENCOURAGING.

5...? SINCE THEY MAY HAVE THREE OR FOUR CLASSES EACH SEMESTER THEY MAY HAVE 80 THEMES TO GRADE EVERY WEEKEND.

6...? ALL THIS EFFORT GOES UNNOTICED.

This questioning is repeated for each of the other two selected paragraphs. Finally the questioning is done.

Having completed this part, the program moves on to its third function, a series of routines which order all the inputted data, combine it with some transitions, and create a complete essay. This part of the program happens very quickly and is totally unseen by the student.

The fourth section of the program outputs the essay just generated. It can do it in one of three forms. In the first form the essay is displayed on the screen one paragraph at a time. The second method prints the essay out on a printer so the student gets a copy. Presumably this copy would be shown to a teacher for suggestions on further development. A third method of output is to a floppy disk. This serves two functions - it gives permanent storage to the electronic equivalent of the essay, and secondly, it makes it accessible to a word processor so it can quickly and easily be modified by the student.

In case you're curious, by the way, here's the printed version of the essay we looked at earlier:

> THE MOST IMPORTANT THING TO KNOW ABOUT COLLEGE ENGLISH TEACHERS IS THEIR JOB OR FUNCTION. THIS IS BECAUSE THEY PLAY A CRUCIAL ROLE IN MODERN SOCIETY. FURTHERMORE, THEIR JOB IS CURRENTLY CHANGING. BESIDES WHICH, NO ONE CARES MUCH WHAT THEY DO AWAY FROM THE JOB.
>
> THE FIRST MAJOR JOB OR FUNCTION OF COLLEGE ENGLISH TEACHERS IS THEY GRADE MOUNTAINS OF PAPERS. IN A SINGLE SEMESTER THEY MAY HAVE TO GRADE SIX TO TEN SETS OF ESSAYS FOR EACH CLASS. THEY MAY ALSO HAVE TO LOOK THROUGH SEVERAL REVISIONS FOR EACH ESSAY. THEY HAVE TO READ THE ESSAY FOR LOGIC, CONTENT, GRAMMAR AND SPELLING ERRORS, AND RHETORICAL EFFECT. THEIR RESPONSES TO STUDENTS HAVE TO BE CLEAR AND ENCOURAGING YET NOT OVERLY ENCOURAGING. SINCE THEY MAY HAVE THREE OR FOUR CLASSES EACH SEMESTER THEY MAY HAVE 80 ESSAYS TO GRADE EVERY WEEKEND. ALL THIS EFFORT GOES UNNOTICED.
>
> ANOTHER IMPORTANT JOB OR FUNCTION OF COLLEGE ENGLISH TEACHERS IS THEY HAVE ONE SEMESTER TO PREPARE STUDENTS FOR ALL THE TYPES OF WRITING THEY WILL DO IN FOUR YEARS OF COLLEGE. STUDENTS IN DIFFERENT MAJORS HAVE DIFFERENT WRITING REQUIREMENTS. SOME HAVE TO DO TECHNICAL WRITING WHILE SOME NEED MORE CREATIVE OR DESCRIPTIVE SKILLS. THIS MEANS THAT ENGLISH TEACHERS CAN EITHER GIVE A VERY GENERAL INTRODUCTION TO WRITING OR RESPOND WITH A SERIES OF SPECIFIC ASSIGNMENTS FOR EACH AREA.

THE LAST MAJOR JOB OR FUNCTION OF COLLEGE ENGLISH TEACHERS IS THEY TRY TO GET STUDENTS TO APPRECIATE WHAT WRITING REALLY IS. STUDENTS OFTEN COME TO COLLEGE ASSUMING THAT ACADEMIC WRITING IS THE AVOIDANCE OF SPELLING AND GRAMMAR ERRORS. THE IDEA OF PLAYING WITH STYLE OR WITH THE CONTENT OF AN ESSAY IS FOREIGN TO THEM. THERE IS ALSO THE COMMON MISCONCEPTION THAT WRITING A SINGLE VERSION OF AN ESSAY IS ALL THAT IS NEEDED. THEY GENERALLY ALSO HAVE NO CLEAR IDEA OF THE EFFECT OF AUDIENCE ON ESSAY CONTENT. MOST IMPORTANTLY THEY SEE WRITING AS A CHORE DIVORCED FROM EFFECT. FOR THEM WRITING IS NOT A TOOL TO MOVE AUDIENCES OR A MEANS OF CLARIFYING THEIR OWN IDEAS.

As you can see, there is still a good deal of work needed on this essay, but it does organize the ideas coherently and supports each of the major ideas with detail. Even in its current limited state it beats the average essay I receive the first few weeks of the semester.

Following this the program goes into its last section - an explanation of how and why it did what it did. Below is the explanation supplied for our example essay:

WHAT DO YOU THINK OF THE ESSAY? WOULD YOU LIKE ME TO SHOW YOU HOW I DID IT?

IF YOU THINK BACK TO SOME OF THE QUESTIONS I ASKED YOU, YOU MAY BE ABLE TO SEE THAT THERE ARE REALLY THREE STEPS I USED TO CREATE THE ESSAY.

FIRST, I TRIED TO GET YOU TO LIMIT YOUR SUBJECT. THAT WAS IMPORTANT BECAUSE MORE SPECIFIC SUBJECTS ALMOST ALWAYS MAKE BETTER ESSAY SUBJECTS.

YOUR FIRST SUBJECT WAS COLLEGE, BUT THEN YOU NARROWED IT TO COLLEGE ENGLISH TEACHERS.

NOW THAT YOU LOOK BACK AT IT, MAYBE YOU CAN THINK OF AN EVEN BETTER SUBJECT TO TRY NEXT TIME. BE SURE IT TOO IS AS SPECIFIC AS POSSIBLE.

DO YOU REMEMBER WHAT MY NEXT STEP WAS? I ASKED YOU TO PICK OUT THE BEST WAY TO DESCRIBE YOUR SUBJECT. YOU SAID IT WAS JOB OR FUNCTION.

THIS WAS ANOTHER WAY TO GET YOU TO FOCUS ON YOUR SUBJECT. THIS TIME YOU FOCUSED ON AN APPROACH. IF YOU THINK ABOUT IT YOU PROBABLY COULD USE ANY OF THE APPROACHES I LISTED, BUT BY PICKING JUST ONE YOU MADE YOUR ESSAY MORE SPECIFIC.

THE REST WAS EASY. FIRST I ASKED YOU TO LIST OUT SOME FEATURES OR EVENTS THAT DETAILED YOUR APPROACH. THE LIST WAS JUST TO GET YOU THINKING ABOUT POSSIBILITIES.

TOO OFTEN WRITERS START WRITING WITHOUT THINKING. THE LIST GIVES YOU SOME OPTIONS TO THINK ABOUT.

DO YOU REMEMBER WHAT YOUR LIST WAS? HERE IT IS AGAIN.

1. THEY GRADE MOUNTAINS OF PAPERS.
2. THEY TRY TO GET STUDENTS TO APPRECIATE WHAT WRITING REALLY IS.
3. THEY HAVE ONE SEMESTER TO PREPARE STUDENTS FOR ALL THE TYPES OF WRITING THEY WILL DO IN FOUR YEARS OF COLLEGE.
4. THEY GO TO REALLY DULL DEPARTMENT MEETINGS.
5. THEY READ PROFESSIONAL JOURNALS.
6. IN ODD MOMENTS THEY MAY ACTUALLY GET TO DO SOME WRITING THEMSELVES.

OF THOSE CHOICES YOU PICKED THESE:

THEY GRADE MOUNTAINS OF PAPERS.

THEY HAVE ONE SEMESTER TO PREPARE STUDENTS FOR ALL THE TYPES OF WRITING THEY WILL DO IN FOUR YEARS OF COLLEGE.

THEY TRY TO GET STUDENTS TO APPRECIATE WHAT WRITING REALLY IS.

ONCE YOU HAD DECIDED WHICH OF THE FEATURES WERE MOST IMPORTANT, I USED THOSE FEATURES TO MAKE PARAGRAPHS FOR THE ESSAY. I STARTED WITH YOUR FEATURE SENTENCE, MADE IT THE TOPIC SENTENCE OF A PARAGRAPH, AND THEN ASKED FOR MORE SENTENCES DESCRIBING THE FEATURE. THOSE SENTENCES BECAME THE BODY OF THE PARAGRAPH. ALL I ADDED WAS AN OCCASIONAL TRANSITIONAL PHRASE TO CONNECT UP THE SENTENCES.

This explanation should help the student better understand the approach used so he/she could use it without the computer. It is

also one of my personal goals to keep computers in general from being seen as twentieth century "magic." What they do is fully understandable by the average person, and every effort should be made to help the average person understand.

So there you have it - a five step program that leads a student through a writing exercise. It is only one form of writing and totally ignores any editing, other than putting the essay on a disk so editing can be done by a word processor or one of several specific editing programs beginning to emerge. The program isn't perfect from either a pedagogical or programming perspective, but it does work. A version is up and running and has been tried by some of my students, and a more fully developed version is being written with support from the Apple Education Foundation.

My hopes for the program are twofold. First, I would like it to attract enough interest so that when someone mentions using computers in English classes, not everyone in the room automatically thinks of grammar drills. Secondly, I'd like the program to quickly become archaic. It pleases me to imagine that in five or ten years, or maybe even one or two years, many programs will be around to help students write, all more flexible and helpful than mine. I will, of course, take immense pride in being one of the first to program in this area. My grandchildren will quickly tire of the story (and all the embellishments I sneak in over the years). I just don't want to be one of the last. I think we have an immense opportunity here and hope we don't ignore it.